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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

STRIMBU, GREGORY J

ART UNIT PAPER NUMBER

3634

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,376

Applicant(s)

HOLCOMB ET AL.

Examiner

Gregory J. Strimbu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004 and 29 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election of Group II in the reply filed on October 29, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1-3 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 29, 2004.

Specification

The abstract of the disclosure is objected to because "for sensing absolute pressure" on line 1 is confusing since it is unclear what element of the invention contains the pressure to which the applicant is referring. On line 4, it is suggested that the applicant insert --a-- following "provide" to avoid confusion. On line 8, "from slow to . . . load lock chamber pressure" is confusing since it is unclear how a pressure can be pumped down. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Recitations such as "and a pressure in a manifold" on line 14 of claim 9 render the claims indefinite because it is unclear what the applicant is attempting to set forth. What is the other pressure the applicant is comparing the pressure in the manifold to? Recitations such as " 10^{-4} torr or lower" on line 21 of claim 9 render the claims indefinite because it is unclear which one of the two alternatives the applicant is attempting to positively set forth.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-29 of U.S. Patent No. 6,672,171. Although the conflicting claims are not identical, they are not patentably distinct from each other because the use of the apparatus as set forth in claims 10-29 of U.S. Patent No. 6,672,171 would inherently lead to the method steps set forth in claims 8 and 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in the preamble of claim 1 in view of the Pressure Measurement and Control in Loadlocks, Ikeda and Stocker et al. The admitted prior art in claim 1 discloses a load lock that facilitates transfer of parts between a room at ambient atmospheric pressure and a vacuum transfer or processing chamber maintained at a pressure less than one torr and that has an evacuable load lock chamber, an exterior door positioned between the load lock chamber and the room, an interior door positioned between the load lock chamber and the processing chamber, an exterior door actuator that is responsive to an exterior door control signal to open or close the exterior door, an interior door actuator that is responsive to an interior door control signal to open or close the interior door, and a vacuum pump connected to the load lock chamber for evacuating the load lock chamber. The admitted prior art in the preamble of claim 1 is silent concerning the particular type of sensors used to measure the pressure in the load lock and means for controlling the signals to the doors.

However, the Pressure Measurement and Control in Loadlocks publication, discloses the control of a loadlock comprising sensing a differential pressure between

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the ambient pressure in the room and a pressure in the loadlock chamber, sensing an absolute pressure in the loadlock chamber.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in claim 1 with differential and absolute pressure transducers, as taught by the Pressure Measurement and Control in Loadlocks publication, to account for barometric pressure changes and accurately measure the pressure in the loadlock chamber during low pressure situations.

Additionally, Ikeda discloses a microprocessor controller which compares the voltage output from a pressure sensor to a stored voltage for controlling a motor.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a microprocessor controller, as taught by Ikeda, to provide a means for accurately controlling the doors.

Finally, Stocker et al. discloses a pressure gauge assembly comprising a manifold 2 and two measuring devices 12 and 21 in fluid flow communication with the manifold.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with manifold, as taught by Stocker et al., to increase the ease with which pressure sensors can be connected to and removed from the loadlock chamber.

Although the combination of the teachings of the admitted prior art in the preamble of claim 1 in view of the Pressure Measurement and Control in Loadlocks, Ikeda and Stocker et al. is silent concerning a particular method of operating the

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loadlock chamber, the use of said combination would inherently lead to the method steps set forth in claim 8.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in the preamble of claim 1 in view of the Pressure Measurement and Control in Loadlocks, Ikeda and Stocker et al. as applied to claim 8 above, and further in view of Shie et al. The admitted prior art in the preamble of claim 1, as modified above, is silent concerning the accuracy of the pirani sensor.

However, Shie et al. discloses a pirani sensor capable of sensing pressures down to at least 10^{-4} torr.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in claim 1 with a pirani sensor, as taught by Shie et al., to more accurately measure the pressure in the load lock chamber at low pressures.

Although the combination of the teachings of the admitted prior art in the preamble of claim 1 in view of the Pressure Measurement and Control in Loadlocks, Ikeda, Stocker et al. and Shie et al. is silent concerning a particular method of operating the loadlock chamber, the use of said combination would inherently lead to the method steps set forth in claim 9.

Response to Arguments

Applicant's arguments filed June 4, 2004 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

THIS ACTION IS NOT MADE FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 703-305-3979. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory J. Strimbu
Primary Examiner
Art Unit 3634
January 7, 2004